Part 1 -- Amendment to the Claims

1. (Original) A method for probing a semiconductor wafer having a front side on which an integrated circuit (IC) is formed and a back side opposite the front side, comprising the steps of:

placing the wafer onto a probe fixture;

retaining the wafer to the probe fixture in a position in which the front side of the wafer is initially facing up;

extending a probe tip of at least one probe from the probe fixture into contact with a contact point of the IC while the wafer is retained in the probe fixture; and

optically examining the IC retained to the probe fixture.

2. (Original) A method as defined in claim 1 further comprising the steps of:

turning over the probe fixture while each probe tip extends into contact with a contact point of the IC to cause the back side of the wafer to face upward; and

viewing the back side of the wafer while optically examining the IC.

3. (Original) A method as defined in claim 2 further comprising the step of:

electrically connecting each probe to supply one of power or signals to the probe before turning the probe fixture over.

4. (Original) A method as defined in claim 2 further comprising the step of:

retaining the wafer in a recess of the probe fixture initially and after turning over the probe fixture.

5. (Currently Amended) A method ~~as defined in claim 4~~ for probing a semiconductor wafer having a front side on which an integrated circuit (IC) is

formed and a back side opposite the front side, ~~further~~ comprising the steps ~~step~~ of:

placing the wafer onto a probe fixture;

retaining the wafer in a recess of the probe fixture in a position in which the front side of the wafer is initially facing up;

extending a probe tip of at least one probe from the probe fixture into contact with a contact point of the IC while the wafer is retained in the probe fixture;

optically examining the IC retained to the probe fixture; and

applying one of reduced pressure or vacuum to the wafer to retain the wafer in the recess.

6. (Original) A method as defined in claim 5 further comprising the step of:

retaining peripheral edges of the wafer on a supporting surface within the recess; and

applying the one of the reduced pressure or vacuum to the peripheral edges of the wafer through holes in the supporting surface.

7. (Original) A method as defined in claim 6 further comprising the step of:

communicating the one of the reduced pressure or vacuum through the probe fixture to the holes in the supporting surface.

8. (Original) A method as defined in claim 1 further comprising the step of:

supporting the entire probe above the wafer when the probe tip extends into contact with a contact surface of the IC.

9. (Original) A method as defined in claim 8 further comprising the steps of:

connecting the probe to a probe adjustment device; and

supporting the position adjustment device above the wafer.

10. (Original) A method as defined in claim 9 further comprising the step of:

adjusting the position of the probe tip on the contact surface of the IC by manipulating the position adjustment device while the position adjustment device is supported above the wafer.

11. (Currently Amended) A method ~~as defined in claim 8~~ for probing a semiconductor wafer having a front side on which an integrated circuit (IC) is formed and a back side opposite the front side, ~~further~~ comprising the steps of:

placing the wafer onto a probe fixture;

retaining the wafer to the probe fixture in a position in which the front side of the wafer is initially facing up;

extending a probe tip of at least one probe from the probe fixture into contact with a contact point of the IC while the wafer is retained in the probe fixture;

optically examining the IC retained to the probe fixture;

extending a rail across and above the wafer retained in the probe fixture; and

supporting the entire probe from the rail above the wafer when the probe tip extends into contact with a contact surface of the IC.

12. (Original) A method as defined in claim 11 further comprising the step of:

adjusting the position of the probe tip relative to the wafer by moving the entire probe along the rail.

13. (Original) A method as defined in claim 12 further comprising the steps of:

connecting a pair of second parallel rails to the probe fixture to extend on opposite sides of the recess and generally transverse to the rail first aforesaid;

movably connecting the first rail to the pair of second rails; and

moving the first rail along the pair of second rails to position the entire probe above the wafer.

14. (Original) A method as defined in claim 1 further comprising the step of:

optically examining the IC on the wafer using a photoemission detection microscope.

15. (Original) A method as defined in claim 1 further comprising the steps of:

placing the probe fixture a platen of a test station; and

retaining the probe fixture to the platen.

16-20. (Canceled)